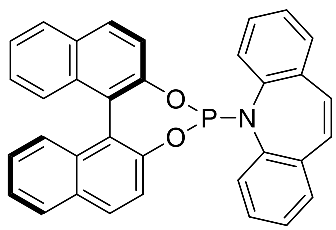
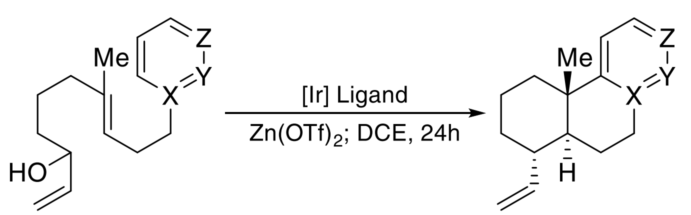
# Strem Chemicals, Inc                    www.strem.com

Catalog # 15-5622  5-(11bR)-5H-Dibenz[b,f]azepine-dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin-4-yl

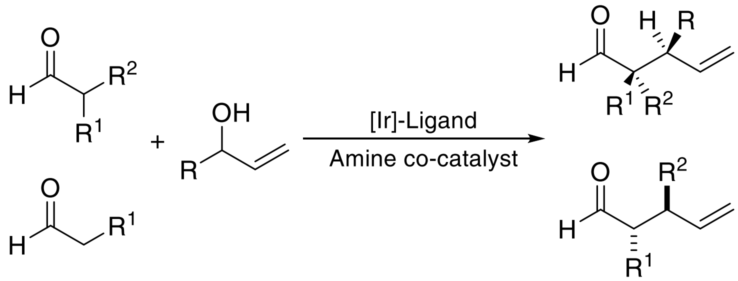



Technical Notes

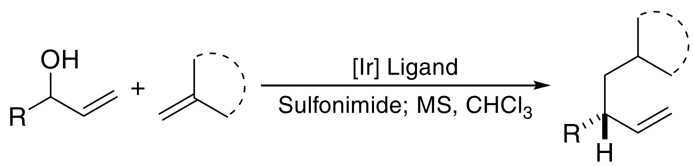
1. Ligand for the Ir-catalyzed enantioselective polyene cyclization.
2. Ligand for Ir-catalyzed enantio- and diastereodivergent α-allylation of branched and linear aldehydes.
3. Ligand for the direct Ir-catalyzed cross-coupling between branched, racemic allylic alcohols and simple olefins.
4. Ligand for the Ir-catalyzed enantioselective allyl-allylsilane cross-coupling.
5. Ligand for the Ir or Pd/aminocatalyst-catalyzed and asymmetric γ-allylation of α,β-unsaturated aldehydes.
6. Ligand for the α-allylation of protected α-amino- and α-hydroxyacetaldehydes.
7. Ligand for the Ir-catalyzed substitution of allylic carbonates using formaldehyde N,N-dialkylhydrazones as neutral C1-nucleophiles.
8. Used in synthesis of chiral, β-substituted homoallylic organoboronic esters via Ag-assisted, Ir-catalyzed allylation of bis[(pinacolato)boryl]methane.
9. Ligand for the Ir-catalyzed enantioselective allylic alkylation that enables the preparation of β-substituted γ,δ-unsaturated esters and protected aldehydes.
10. Ligand for the enantioconvergent C(sp3)–C(sp3) coupling between racemic allenylic electrophiles and alkylzinc reagents to generate highly asymmetric preparation of allenylic carbonates over the corresponding diene isomers.
11. Ligand used in Pd catalyzed tandem allylation/1,2-boronate rearrangement for the asymmetric synthesis of indolines with adjacent quaternary stereocenters.
12. Ligand for the Ir-catalyzed enantioselective allylation of N-, O- and S-nucleophiles, also chloro- and Bromoacetaldehyde in water.
13. Ligand for the Ir-catalyzed allylic alkylation of racemic allylic alcohols with malonates.
14. Ligand for the Ir-catalyzed enantioselective allylation of aryl enamides and enecarbamates.



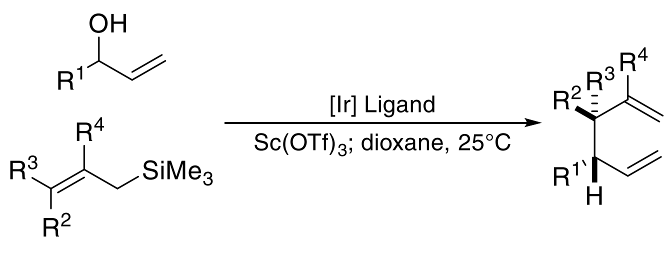

**Tech. Note (1); Ref. (1)**



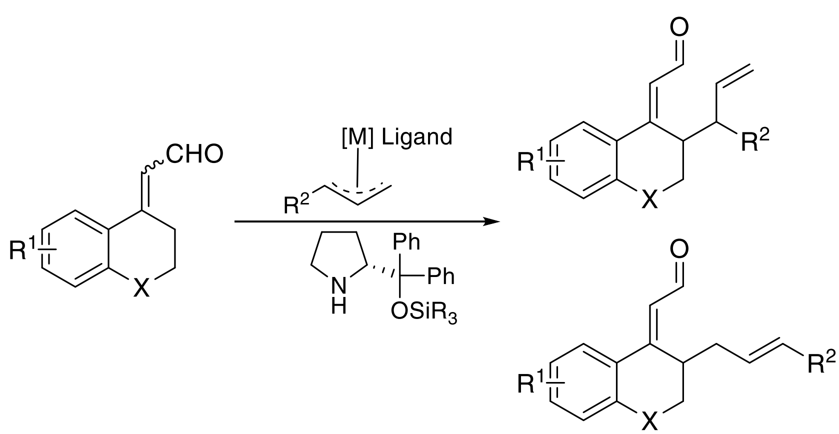

**Tech. Note (2); Ref. (2-3)**



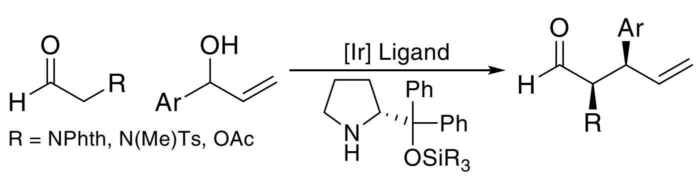

**Tech. Note (3); Ref. (4)**



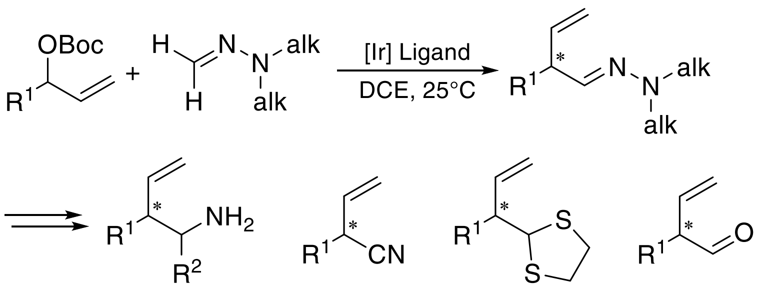

**Tech. Note (4); Ref. (5)**



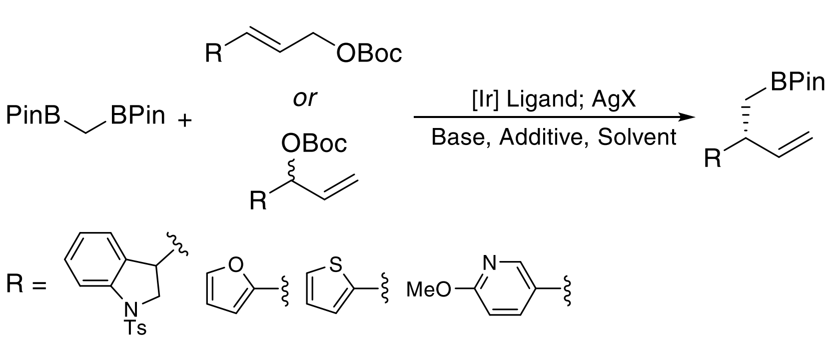

**Tech. Note (5); Ref. (6)**



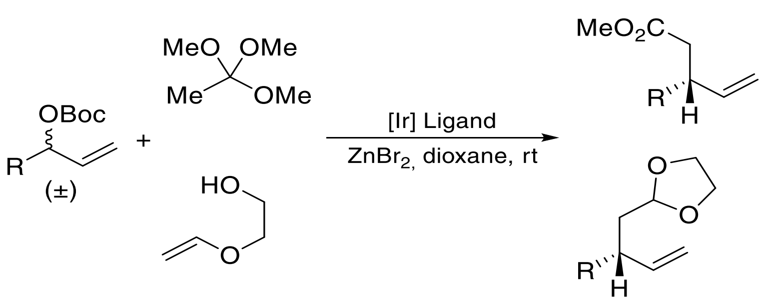

**Tech. Note (6); Ref. (7)**



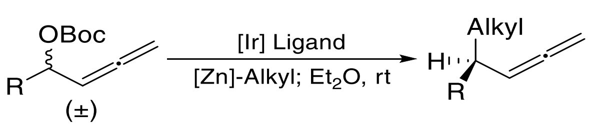

**Tech. Note (7); Ref. (8)**



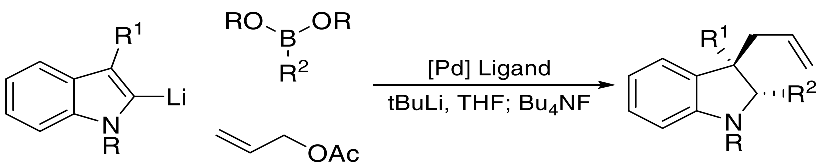

**Tech. Note (8); Ref. (9)**



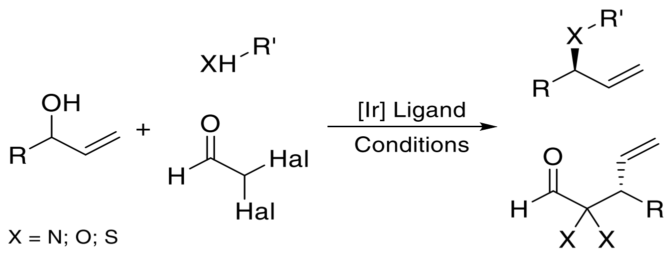

**Tech. Note (9); Ref. (10)**



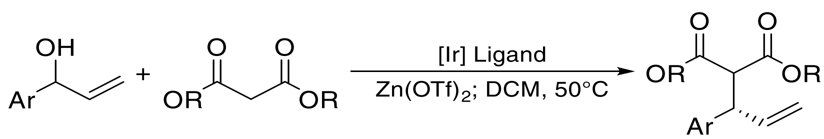

**Tech. Note (10); Ref. (11)**



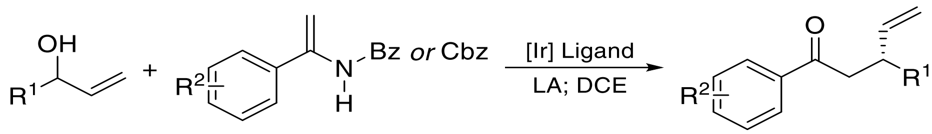

**Tech. Note (11); Ref. (12)**




**Tech. Note (12); Ref. (13)**




**Tech. Note (13); Ref. (14)**




**Tech. Note (14); Ref. (15)**

References:


1. *J. Am. Chem. Soc.* **2012**, *134*, 20276.
2. *Science*, **2013**, *340*, 1065.
3. *J. Am. Chem. Soc.* **2014**, *136*, 3020.
4. *J. Am. Chem. Soc.* **2014**, *136*, 3006.
5. *Angew. Chem. Int. Ed.* **2014**, *53*, 10759.
6. *Angew. Chem. Int. Ed.* **2015**, *54*, *10193.*
7. *Angew. Chem. Int. Ed.* **2015**, *54*, *14363.*
8. *J. Am. Chem. Soc.* **2015**, *137*, 5296.
9. *ACS Catal.* **2016**, *6*, 3381.
10. *Angew. Chem. Int. Ed.* **2018**, *57*, 7654.
11. *J. Am. Chem. Soc.* **2018**, *140*, 4697.
12. *J. Am. Chem. Soc.* **2018**, *140*, 13242.
13. *J. Am. Chem. Soc.* **2019**, *141*, 12212.
14. *Org. Lett.* **2019**, *21*, 840.
15. *Org. Lett.* **2019**, *21*, 2449.